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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,130	08/30/2000	Kent Malmgren	1010315-000092	1064

21839 7590 05/12/2006

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EXAMINER
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CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/651,130

Applicant(s)

MALMGREN ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,15 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,15 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Introduction***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 4/7/2006 has been entered.
2. The Examiner has carefully considered Applicants' declaration, amendments and remarks filed on 4/7/2006. Applicants' amendments to claims 1, 13 and 15 have been entered.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Rejections not maintained are withdrawn.

### ***Rejections Based on Prior Art***

5. Claims 1, 2, 4-13, 15 and 20 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Chen et al. (US 6261679), generally as set forth in section 9 of Examiner's answer mailed 10/6/2005, together with the following additional reasoning and response to argument.

First, for the purpose of clarity, the Examiner repeats the relied upon prior art as follows: Chen's invention is directed to an open-cell fibrous absorbent structure for use as absorbent articles such as feminine care pads, diapers, incontinence articles, bed pads and bandages for the intake, distribution, and retention of human body fluids (column 2, lines 5-49). Hydrophilic fibers can be any known cellulosic fibers, such as fibers derived from chitin, chitosan, starch, or other polysaccharides can also be used (column 7, lines 35-55). The polymeric binder material in the structuring composition may be rendered foamable at least in part due to the presence of foaming agents such as a surfactant by mechanical agitation (column 11, line 47 to column 12, line 5). Suitable swellable binder materials include polysaccharides such as carboxymethyl celluloses, etc., and synthetic polypeptides such as polyaspartic acid, etc. (column 12, line 31-45). Cells defined by the foamable binder material can be about 3 mm or less; specifically about 1 mm or less, more specifically about 0.3 mm or less, still more specifically about 0.1 mm or less, and most specifically from about 0.02 mm to about 0.2 mm (column 42, lines 33-38).

For claims 1, 2, 4-6, 8-12 and 20, Chen is silent about the absorption rate, liquid distribution capacity, liquid storage capacity and gel liquid absorption under certain specific testing conditions. However, Chen does teach an absorbent article formed by the same composition, and expressly teaches that cells defined by the foamable binder material can be about 3 mm or less; specifically about 1 mm or less, more specifically about 0.3 mm or less, still more specifically about 0.1 mm or less, and most specifically from about 0.02 mm to about 0.2 mm (column 42, lines 33-38), which reads on the pore

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size (a distribution of pore sizes between 0 and 3  $\mu\text{m}$ ) as claimed. Further, Chen also teaches essentially the same process of: a) mixing fibers and binder resins (column 11, lines 47-55; and column 21, line 43 to column 22, line 25), b) foaming by gas injection or mechanical agitation (column 16, lines 10-24), c) optionally incorporating a crosslinking agent (column 29, line 20 to column 31, line 34), d) molding foamed mixture (column 26, lines 13-23), and e) freeze drying (column 17, line 66 to column 18, line 39) as the instant invention (see specification, pages 9 and 10). Regarding the term "gel liquid", it is noted that the specification merely defines the terms "gel liquid" and "capillary liquid" as "Gel liquid refers to liquid held in pores smaller than 3  $\mu\text{m}$  and capillary liquid refers to loosely bound liquid in pores larger than 3  $\mu\text{m}$  and up to 500  $\mu\text{m}$ " (specification, page 5, second paragraph from the bottom), clearly they are liquids of the same composition being absorbed in pores of different ranges of sizes. As such, clearly Chen teaches substantially the same subject matter (an absorbent structure), comprising the same structure (cell size), the same composition (a mixture of the same hydrophilic fiber and binder materials), made by the same process, and for the same use (absorbing human body fluids, etc.), it is the Examiner's position that, in the absence of evidence to the contrary, suitable absorbent properties (absorption rate, liquid distribution capacity, liquid storage capacity and gel liquid absorption) are either anticipated by Chen, or are obviously provided by practicing the invention of the prior art. It should be noted that where the claimed and prior art products are shown to be identical or substantially identical in structure or composition, or are produced by identical or substantially

identical processes, a *prima facie* case of either anticipation or obviousness has been established. See MPEP § 2112.01.

For claim 7, Chen teaches that the absorbent structure may be used as diapers, incontinence articles, etc., as set forth above, which are inherently shaped to fit a wearer's three-dimensional body anatomy.

For claims 13 and 15, the Examiner repeats that Chen's teaching of the cells defined by the foamable binder material being about 3 mm or less; specifically about 1 mm or less, more specifically about 0.3 mm or less, still more specifically about 0.1 mm or less, as set forth above, read on the distributions of pore sizes of instant inventions as claimed.

### ***Response to Argument***

6. Applicants' argument "... a declaration from Kent Malmgren ... present evidence of unexpected results ... as compared to the material taught by Chen ... Chen does not teach or suggest an absorbent material that provides the claimed properties ... Chen material ... is not capable of providing satisfactory liquid distribution capacity without sacrificing satisfactory storage capacity ... is not capable of providing satisfactory values for absorption rate, liquid distribution capacity, and storage capacity while also providing satisfactory gel liquid absorption ... Unexpectedly, applicants have discovered a liquid absorbent material that is capable of balancing the claimed properties ... It is an unexpected result to be able to balance liquid distribution capacity and storage capacity at satisfactory levels ... it is unexpected to be able to obtain satisfactory values for

absorption rate, liquid distribution capacity, and storage capacity while also providing satisfactory gel liquid absorption.” (Remarks, pages 5 and 6) has been carefully considered, but is not persuasive. In response, the Examiner notes: 1) Applicants are reminded that evidence of secondary considerations, such as unexpected results or commercial success, is irrelevant to 35 U.S.C. 102 rejections and thus cannot overcome a rejection so based. See MPEP § 2131.04. 2) Applicants are also reminded that while the Declaration presents properties from samples made according to one example (Example 3) of Chen, nowhere is there a teaching by Chen that the invention, as a whole, is so limited. 3) The Declaration fails to provide a fair comparison between the inventions by clearly pointing out any distinct features or limitations in the scope of structure and/or composition. Merely presenting certain properties of one single example clearly fails to exclude the whole teachings of Chen.

With respect to Applicants’ argument “... Chen proclaims to be focused on a primarily fibrous absorbent structure in contrast to fiber-reinforced foams ... The resulting large fibrous structure pore sizes ... offer relatively little capillary pressure ... To remedy the low capillary pressure of the fibrous structure, Chen discloses the use of open cell foam binder in a manner to also increase capillary pressure. Thus, Chen is focused on ... storing capillary liquid ... one skilled in the art would not be motivated and is not taught how to incorporate satisfactory gel liquid storage ...” (Remarks, page 7), the Examiner asserts that since Chen teaches substantially the same subject matter (an absorbent structure), comprising the same structure (cell size), the same composition (a mixture of the same hydrophilic fiber and binder materials), made by the same process,

and for the same use (absorbing human body fluids, etc.), it is the Examiner's position that, in the absence of evidence to the contrary, suitable absorbent properties (absorption rate, liquid distribution capacity, liquid storage capacity and gel liquid absorption) are either anticipated by Chen, or are obviously provided by practicing the invention of the prior art. In other words, whether Chen's focus is on storing capillary liquid or silicone or "gel liquid absorption" bears no weight on the patentability of instant invention, and gel liquid absorption merely appears to be an undocumented latent property of Chen's absorbent article, because it anticipates all the structure and composition limitations as claimed.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

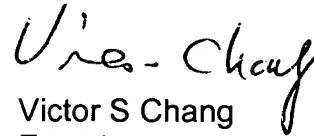
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.



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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Vic - Chang", written in a cursive style.

Victor S Chang  
Examiner  
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5/9/2006